

The Invention Claimed Is

1. Circuitry for progressively arithmetically accumulating a succession of arithmetic values respectively represented by successive digital input signals to produce successive digital output signals respectively indicative of successive accumulated values comprising:

first one's complement circuitry adapted to one's-complement each successive accumulated value;

adder circuitry adapted to successively add each successive arithmetic value to concurrent outputs of the first one's complement circuitry; and

second one's complement circuitry adapted to one's-complement outputs of the adder circuitry to produce a next successive accumulated value.

2. The circuitry defined in claim 1 further comprising:

sign extension circuitry adapted to sign-extend each successive arithmetic value.

3. The circuitry defined in claim 1 further comprising:

alternative circuitry adapted to selectively cause the first and second one's complement circuitry to pass values without one's complementing them.

4. The circuitry defined in claim 3 further comprising:

programmable circuitry adapted to control whether the alternative circuitry is operative.

5. The circuitry defined in claim 3 further comprising:

control circuitry adapted to apply a time-varying signal to the alternative circuitry so that the alternative circuitry is operative only at certain times.